

Mini Review of BCG (*Bacillus Calmette-Guérin*) Therapy Prediction by Purified Protein Derivative Skin Test (PPD) in Non-Muscle Invasive Bladder Cancer



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Abstract

Cancer immunotherapy in bladder superficial cancer evokes immune check points to invoke immunity to destroy cancer cells. PPD hypersensitivity accompanies with longer survival however it may predict more serious complications. More hypersensitive PPD skin test may forecast more side effects and less bladder tumor recurrence.

Keywords: BCG; PPD; Bladder cancer

Introduction

Cancer immunotherapy in bladder superficial cancer evokes immune check points to invoke immunity to destroy cancer cells [1]. BCG binding to basement membrane fibronectin may be crucial in delayed type hypersensitivity and anti-tumor activity [2]. Intravesical BCG may induce infectious complications [3]. Although these infections may diagnosed with PPD- Enzyme linked immune spot assay after BCG vesical instillation [4].

PPD hypersensitivity accompanied with longer survival however it may predict more serious complications [5]. PPD could not foretell the complications in all studies [6]. On the other hand some reported that PPD prior to intra vesical BCG may mend oncological outcome [7]. Moreover, serum BCG antibody elevation may correlate with immunoadjuvant response of intra vesical BCG thrapy [8]. Intra vesical BCG instillation is standard for superficial bladder cancer treatment [9]. More hypersensitive PPD skin test may forecast more side effects and less bladder tumor recurrence [10].

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